This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-13, 15, 19-22, 27-30, 33, and 35 (canceled).

14. (Twice Amended) A multi-piece mold as claimed in Claim 24, wherein ~~the glass tube is a hollow cylindrical glass tube; and wherein~~ the heat source includes distribution channels through which gas may be distributed with gas jets emanating along the inner surface of at least one of the pieces.

16. (Twice Amended) A multi-piece mold as claimed in Claim 14, wherein the distribution channels within the at least one piece ~~is~~ are coupled to tubing coupling the distribution channels to a gas fitting to which a source of gas may be attached.

17. (Previously Amended) A multi-piece mold as claimed in Claim 14, wherein ejection of gas occurs at several points along the inner surface of at least one piece.

18. (Previously Amended) A multi-piece mold as claimed in Claim 14, wherein at least one of said pieces includes ventilation channels extending between its inner and outer surfaces to enable air and gases trapped between outer walls of the tube and the inner surfaces of the mold to escape.

23. (Original) A multi-piece mold as claimed in Claim 14, wherein the pieces of the mold are formed of material capable of operating at temperatures in excess of the melting point of glass and without contaminating the glass.

24. (Thrice Amended) A multi-piece mold for shaping an end portion of a glass tube having an opening, said mold comprising:

two ~~elongated sleeve-like~~ side pieces which, when joined, ~~encircle a~~ form a cavity which can enclose an end portion of ~~the~~ a tube for shaping the tube; and

an end plug ~~piece~~ including an end cap and a cylindrical stub ~~positioned at a free end of said end plug and~~ having a diameter less than a diameter of said end ~~plug~~ cap, said stub being configured for insertion into the opening of the tube for allowing rotational movement of the tube about said cylindrical stub for controlling the inner diameter of the tube; ~~and~~

wherein at least one of said side pieces ~~of the mold~~ includes a heat source, formed within the one piece, for heating the tube to render it malleable.

25. (Original) A multi-piece mold as claimed in claim 24 wherein the heat source includes heating gas distribution channels, formed within the one piece of said multi-piece mold, with said distribution channels formed to eject gas along an inner surface of said one piece of said multi-piece mold.

26. (Original) A multi-piece mold as claimed in Claim 24 wherein said tube is an exhaust tube shaped to mate with a starter tube, such that the exhaust and starter tubes can be joined easily at their mating ends.

31. (Thrice Amended) Apparatus for shaping ~~a selected~~ an end portion of a glass tube having an opening, said apparatus comprising:

~~a support~~ means for holding the tube and for imparting rotational motion to the tube;

a multi-piece mold ~~having one piece in which is formed a heat distribution source, said mold~~ having two side pieces for imparting ~~an oblate cone-like~~ a substantially conical shape to ~~a selected~~ an end portion of the tube while leaving an opening for accessing the opening of the tube, ~~at its selected end~~ one of said side pieces having a heat distribution source formed therein, and wherein said mold includes an end plug ~~and~~ having an end cap and a cylindrical stub ~~positioned at a free end of said end plug and~~ having a diameter less than a diameter of said end ~~plug~~ cap, said stub being configured for insertion in the opening of the tube for allowing rotational movement of the tube about the end plug for controlling the inner diameter of the tube at its end surface; and

an actuatable mechanical holding means for holding the multi piece mold, including means for holding the one piece in which is formed a heat distribution source, in proximity to the selected portion of the tube for heating the selected tube portion to render it malleable, and for selectively applying the mold pieces to the tube for shaping the selected portion of the tube.

32. (Original) An apparatus as claimed in Claim 31, wherein the apparatus includes temperature sensing means for sensing the temperature of the selected portion of the tube; and wherein the apparatus includes means responsive to a signal from the temperature sensing means for applying the mold pieces to the selected portion of the tube.

34. (Twice Amended) An apparatus as claimed in Claim 31, ~~wherein~~ further comprising means for supplying positive air pressure ~~is supplied~~ to the tube ~~at its unselected end,~~ while the ~~selected~~ end portion of the tube is being heated and molded, to cause the tube to conform to the shape being imparted by the mold.

48. (New) A multi-piece mold for shaping an end portion of a glass tube to form an exhaust tube which is fitted to a starter tube of an optical fiber preform, said multi-piece mold comprising:

two complementary side pieces having inner surfaces which, when joined, form a cavity which can enclose an end portion of a glass tube for shaping the tube, said cavity having a first cylindrical section, a second cylindrical section, and a conical section which tapers from said first cylindrical section down to said second cylindrical section, and

an end plug comprising an end cap and a cylindrical stub, said cylindrical stub having a first section with a first diameter which is smaller than the diameter of said end cap and a second section with a second diameter which is smaller than said first diameter, said cylindrical stub being receivable in said second cylindrical section of said cavity to shape an inside surface of said end portion of the glass tube so that said end portion has a first region with said first diameter, a second region with said second smaller diameter, and a shoulder separating said first and second end regions, whereby,

said end portion of said tube can snugly receive an end of a starter tube having an outside diameter which is slightly smaller than said first diameter and an inside diameter which is substantially the same as said second diameter to form a preform having an exhaust tube which is centered with respect to said starter tube and having an inside surface with a smooth transition between said exhaust tube and said starter tube.